POLICY SERIES

No. 235 / MAY 2021

DUE DILIGENCE

CANADIAN CHARTER OF RIGHTS AND FREEDOMS VS "LOCKDOWNS"

BY DAVID REDMAN

FRONTIER CENTRE FOR PUBLIC POLICY

Ideas that change your world / www.fcpp.org

DAVID REDMAN

David Redman was an officer in the Canadian Army for 27 years, retiring as a Lieutenant Colonel. He was posted 19 times to operations in Germany, Egypt, the Former Republic of Yugoslavia, the USA, and across Canada. In 2000 he became a part of what is now called the Alberta Emergency Management Agency. Following September 11, 2001, he led the development and implementation of the Alberta Crisis Management Counter-Terrorism Plan. He became the Head of EMA in 2004 and led the Provincial response to the devastating floods of June 2005. He also led the development of the 2005 Provincial Pandemic Influenza Plan. He retired from EMA in December 2005, continuing to work as an expert in Emergency Management provincially, nationally and internationally until 2013 when he fully retired.

David Redman has a Bachelor's Degree in Electrical Engineering from the Royal Military College of Canada, and a Master's Degree in Electrical Engineering from the United States Naval Postgraduate School. He is a graduate of both the Canadian Land Forces Command and Staff College, in Kingston, Ontario and the Canadian Forces Command and Staff College, in Toronto, Ontario.

FRONTIER CENTRE
FOR PUBLIC POLICY

203-2727 Portage Avenue, Winnipeg, Manitoba Canada R3J 0R2
Tel: 204-957-1567
Email: newideas@fcpp.org

Policy Series No. 235 • Date of First Issue: May 2021.

Frontier Centre for Public Policy expresses its appreciation and thanks to the Lotte and John Hecht Memorial Foundation for supporting for this project.

ISSN 1491-78

Ideas that change your world / www.fcpp.org

POLICY SERIES
No. 235 / MAY 2021

DUE DILIGENCE

CANADIAN CHARTER OF RIGHTS AND FREEDOMS VS "LOCKDOWNS"

BY DAVID REDMAN

TABLE OF CONTENTS

BACKGROUND

COVID-19

For this paper, the term COVID-19 will be used to mean the Coronavirus, SARS CoV-2, and COVID-19 and its so-called variants. (Reference A)

Due Diligence

The responsibility of leadership is to ensure they carry out "due diligence" in the performance of their leadership roles. A definition of "due diligence" is: (Reference B):

1. ***law:*** the care that a reasonable person exercises to avoid harm to other persons or their property
2. ***business:*** research and analysis of a company or organization done in preparation for a business transaction (such as a corporate merger or purchase of securities)

Due diligence has been used since at least the mid-fifteenth century in the literal sense "requisite effort." Centuries later, the phrase developed a legal meaning, namely, "the care that a reasonable person takes to avoid harm to other persons or their property".

The definition implies leaders are accountable to know their responsibilities and have the knowledge and skill required to perform these duties. A further requirement is often stated that:

- they had or should have had the knowledge, and;
- had or should have had the skill.

There can be few more responsible positions during a Pandemic than the Premier of a Province/Territory, the Medical Officer of Health of a Province/Territory, the Deputy Minister of Health of a Province/Territory, and the Head of the Health Agency for a Province/Territory. The same is true for the federal equivalents.

The Canadian Charter of Rights and Freedoms

The Charter (Reference C) states:

It is recognized that the constitutional rights of Canadians are not "unlimited"—that the Charter of Rights and Freedoms guarantees the rights and freedoms set out in it **"subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society".**

When I was placed in charge of Emergency Management Alberta to write and implement the Alberta Crisis Management Counter-Terrorism Plan following September 11, 2001, the phrase **"subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society"** was the acid test. It was the measure used to demonstrate the application of "Due Diligence" before new legislation, legislation changes, policy, plans, and procedures could be implemented. Everything had to be written and justified.

The process we followed, while intense, was necessary to protect Charter Rights and Freedoms while stopping those who wished to deny them. Conversely, I was horrified by the Patriot Act in the USA that did not recognize the need for "demonstrably justified".

COVID-19 DUE DILIGENCE

The Provincial/Territorial governments and the Federal government have not done their "Due Diligence" to demonstrably justify their response to the COVID-19 Pandemic.

That means each denial of Charter Rights and Freedoms is illegal.

In order for the governments to demonstrably justify the denial of Charter Rights and Freedoms, it requires the following to occur:

1. Publication to Citizens of a Written COVID-19 Pandemic Plan

a. Before COVID-19 was declared a Pandemic on March 11, 2020, every Canadian Province/Territory and the Federal Government of Canada had developed and written a Pandemic Plan. (Reference D)

b. Prior to the declaration of a Pandemic, Canada had the time to review what was happening in China, other Asian countries, and in Europe. (Reference E)

c. Therefore, the Federal and Provincial/Territorial governments had time to review their existing Pandemic Plans.

d. This review should have been done to make the Pandemic Plans specific to COVID-19.

e. This review should have included a clear definition of the severity of the virus. (See Annex A)

f. The resulting comprehensive COVID-19 Pandemic Plans should have been published by each order of government to the citizens of their jurisdictions.

g. This first step in "Due Diligence" has not occurred Federally or Provincially/Territorially.

2. Non-Pharmaceutical Interventions (NPI)

Prior to the arrival of COVID-19, the World Health Organization (WHO) had rewritten and republished a guidance document, "Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza dated 2019". (Reference F)

a. This document was preceded by a WHO NPI publication that stated on Page 9, section 1.1.3. (Reference F)

    i. WHO published guidance on NPIs in 2009 in response to the emergence of influenza A(H1N1) pdm09 (32-35). That guidance provided recommendations on the measures that can be used to reduce influenza transmission and mitigate the impact of epidemics and pandemics.

b. These documents included the world's best studies and information on the use of fifteen separate non-pharmaceutical interventions. (See Annex B)

c. The use of these NPIs was discussed in the development of the existing Provincial Plans.

d. The 2019 document was known, or should have been known, by all Medical Officers of Health in Canada.

e. The use of each of the NPIs was dependant on the severity of the pandemic.

f. Even in a High or Extraordinary Pandemic (References F&G) the use of all or a majority of these NPIs at the same time was not envisioned.

3. Provincial and Federal Pandemic Plans

a. Links to all 13 Provincial/Territorial Pandemic Plans and the Canadian Federal Pandemic Plan are available on www.pandemicalternative.org (Reference D)

b. Examination of these plans shows that "societal lockdowns" or the use of most of the NPIs was not envisioned.

c. Therefore, if this form of mitigation was determined to be necessary, a clear written plan needed to be issued to Canadians showing exactly why each of these extraordinary measures was to be used, and a clear plan to deal with all the known collateral damage that these lockdowns would produce.

d. This has never happened, a second violation of "Due Diligence".

4. Implementation of each Non-Pharmaceutical Intervention (NPI)

a. Prior to the use of each NPI, the Federal and Provincial/Territorial governments needed to demonstrably justify how each NPI would protect the life of Canadians.

b. Some of the NPIs were not recommended for use in any Pandemic. (See Annex A)

i. Contact Tracing (not recommended after first two weeks)

ii. Quarantine of Exposed Individuals

iii. Entry and Exit Screening

iv. Border Closures

c. Some of the NPIs were recommended for use only as a last resort. Despite this, they were used as a first resort. (See Annex A)

i. Workplace Measures and Closures

d. Some NPIs were not recommended for a pandemic with the severity of COVID-19. (See Annex A) These recommendations were ignored.

i. School Measures and Closures

ii. Face Masks for Public

e. The complete disregard for the world's best practices in the use of NPIs (Reference F) shows a complete lack of "Due Diligence".

f. The lack of any attempt to publicly demonstrate a cost benefit analysis based on life and impact on lives shows a complete disregard for "Due Diligence". (Reference T)

g. In summary, the collateral damage from the use of each NPI needed to be justified in a cost benefit analysis, showing not just what life saving could be expected, but what the short term and long-term life costs would be. Further, it needed to be demonstrably shown why the WHO recommendations were being ignored.

h. This was never done for any of the NPIs invoked; this is another violation of "Due Diligence".

5. Protection of Those Most at Risk

a. Back in January, February, and early March, it was known that at least 95% of all COVID-19 deaths were attributed to individuals over the age of 60, with multiple severe co-morbidities. (Reference E)

b. Therefore, the overarching duty of the Federal government and the Provincial/Territorial governments was to prioritize the protection of their citizens in this category.

c. These citizens in Canada, over the age of 60 with multiple severe comorbidities, are found in the largest degree in Long Term Care (LTC) homes.

d. Nothing was done to protect these most-at-risk individuals until they started dying in the thousands. (Reference R)

e. To this day, Canadian LTC home residents and staff have yet to be quarantined or adequately protected and so their residents continue to die.

f. Canada has been rated the worst in the protection of seniors during COVID-19 among the 37 member states of the Organization for Economic Co-Operation and development (OECD) (Reference I)

i. In June 2020, the Canadian Institute for Health Information reported that Canada had a higher proportion of COVID-19 deaths within LTC settings than other OECD countries included in its comparison. At that time, deaths in Canadian LTCs from COVID-19 were at 81% of the total, while OECD countries reported LTC COVID-19 deaths of 10-66% (average of 38%) of their totals.

ii. As noted above, the NIA indicated that to date, 11% of COVID-19 cases and 73% of all COVID-19 deaths in Canada have been in LTC facilities, affecting both residents and staff. NIA's summary also revealed that 82% of all COVID-19 cases within LTC facilities in Canada, and 88% of deaths, were in Ontario and Quebec.

g. This is a demonstrably negligent lack of "Due Diligence".

6. Use of "Lockdowns" verses "Non-Lockdown" Measures

a. Even as massive collateral damage mounts, caused to a large degree by the use of Non-pharmaceutical Measures (Reference J), Provincial/Territorial Premiers and MOH, as well as the Canadian Prime Minister and CMOH, continue to demand the use of NPIs; which were clearly not recommended in any Pandemic or not recommended for use in this Pandemic (Appendix A and B)

b. Premiers and MOH ignored peer reviewed science that shows the use of NPI "lockdowns" do not even have significant effect on the spread of COVID-19. (Reference K)

c. "Conclusions: While small benefits cannot be excluded, we do not find significant benefits on case growth of more restrictive NPIs. Similar reductions in case growth may be achievable with less-restrictive interventions."

d. Peer reviewed studies continuously "re-proved" what had been established in the Lessons Learned about NPIs. These masses of studies were ignored. (References S & T)

e. A continuing grossly negligent lack of "Due Diligence".

7. Lack of Perspective—Creating Fear

a. Even after a full year, the Prime Minister, Premiers, and MOH refuse to recognize that many of the "lockdown" NPI are not the correct response to COVID-19.

b. Massive and enduring collateral damage is reported routinely in the press and in peer reviewed studies. (Reference J)

c. The peer reviewed science that "lockdowns" do not have "significant benefits on case growth." (Reference K & S) is obvious and available.

d. Over 96% of all deaths from COVID-19 in Canada have been in seniors, over the age of 60, with multiple severe comorbidities (Reference L). This fact is routinely, in my opinion intentionally, omitted in daily briefings. It is implied that everyone is at equal risk of dying from COVID-19.

e. Only 3.9% of deaths in Canada from COVID-19 have been in Canadians under the age of 60. (Reference L) This fact is routinely, in my opinion intentionally, omitted in daily briefings. Conversely, when even one person under the age of forty dies each individual example is highlighted to generate a fear response to ensure compliance with inappropriate "lockdown" NPIs.

f. Further, fear is generated by using whole numbers with no denominators. Daily hospitalization and ICU usage numbers were/are given without denominators (i.e. how many real total acute care beds and ICU beds are available). In the rare incidences where denominators were given, the number of beds "allocated" to COVID-19 patients constantly

changed. Fear was/is used daily in this manner across Canada to ensure compliance with inappropriate use of "lockdown" NPIs. This is not "Due Diligence."

g. Regardless, for anyone under the age of 60, based on a full year of COVID-19 in Canada, the odds of dying from a car accident is 50% higher than dying from COVID-19. (See Appendix C)

h. For Canadians between the ages of 20-40, the odds of dying from a car accident are 5 times higher than from COVID-19. (Appendix C)

i. Even for seniors over the age of 70, they have twice as much chance of dying from a heart attack than from COVID-19. (Appendix C)

j. More comparisons are shown in Appendix C.

k. This shows, that even to this date, the Prime Minister, Premiers, and MOH refuse to place COVID-19 in perspective to other life risks.

l. They continue to use Non-pharmaceutic Measures, many not recommended for any Pandemic and many not recommended for this Pandemic, which they know cause massive collateral damage. (Appendix A and B)

m. This shows, in my opinion, gross negligence, in a continuing lack of "Due Diligence."

CONCLUSIONS

For the multiple reasons stated, that the Canadian Prime Minister, Provincial Premiers, and Medical Officers of Health, have continuously not done their required "Due Diligence", in responding to COVID-19.

They have not **demonstrably justified** why they deny Charter Rights and Freedoms.

Therefore, their denial of Charter Rights and Freedoms is illegal.

Their continued lack of "Due Diligence" after a full year shows gross negligence of this requirement.

For all the above stated reasons, the use of "lockdowns" should be removed immediately, as they do far more harm than good and they are an illegal denial of Charter Rights and Freedoms.

REFERENCES

A. World Health Organization—Coronavirus
https://www.who.int/emergencies/diseases/novel-coronavirus-2019

B. Merriam Webster Dictionary
https://www.merriam-webster.com/dictionary/due%20diligence#note-1

C. The Canadian Charter of Rights and Freedoms
https://laws-lois.justice.gc.ca/eng/const/page-15.html

D. Pandemic Alternative Research Website
https://pandemicalternative.org/index.php/resources/11-resource-pandemic-plan

E. World Health Organization Weekly Reports—Coronavirus disease
https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/previous-weekly-surveillance-reports

F. World Health Organization Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza dated 2019
https://apps.who.int/iris/bitstream/handle/10665/329438/9789241516839-eng.pdf

G. The Centres for Disease Control (CDC) Pandemic Severity Assessment Framework (PSAF)
https://www.cdc.gov/flu/pandemic-resources/national-strategy/severity-assessment-framework.html

H. COVID-19: Rethinking the Lockdown Groupthink
https://www.frontiersin.org/articles/10.3389/fpubh.2021.625778/full

I. Long-Term Care Homes in Canada—The Impact of COVID-19 Library of Parliament (updated January 5, 2021)
https://hillnotes.ca/2020/10/30/long-term-care-homes-in-canada-the-impact-of-covid-19/

J. A global knowledgebase of the consequences to the public health measures implemented in response to the SARS-Cov-2 pandemic
https://collateralglobal.org/

K. Assessing mandatory stay-at-home and business closure effects on the spread of COVID-19
https://onlinelibrary.wiley.com/doi/10.1111/eci.13484

L. Health Canada Coronavirus disease 2019 (COVID-19): Epidemiology update Figure 5
https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html

M. Transport Canada Motor Vehicle Traffic Collision Statistics 2018
https://tc.canada.ca/en/road-transportation/motor-vehicle-safety/canadian-motor-vehicle-traffic-collision-statistics-2018

N. Statistics Canada—Leading Causes of Death in Canada 2019
https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039401&pickMembers%5B0%5D=2.13&pickMembers%5B1%5D=3.1&cubeTimeFrame.startYear=2017&cubeTimeFrame.endYear=2019&referencePeriods=20170101%2C20190101

O. The Canadian Encyclopedia—1918 Spanish Flu in Canada
https://www.thecanadianencyclopedia.ca/en/article/1918-spanish-flu-in-canada

P. CDC History of 1918 Flu Pandemic
https://www.cdc.gov/flu/pandemic-resources/1918-commemoration/1918-pandemic-history.htm

Q. SinoBiological—Asian Flu (1957 Influenza Pandemic)
https://www.sinobiological.com/research/virus/1957-influenza-pandemic-asian-flu

R. The Avoidable Tragedy
https://www.capitaldaily.ca/news/preventable-tragedy-covid19-long-term-care-homes-canada-public-health

S. Lockdowns do not Control the Coronavirus—The Evidence
https://www.aier.org/article/lockdowns-do-not-control-the-coronavirus-the-evidence/

T. Covid Lockdowns Cost Benefits
http://www.sfu.ca/~allen/LockdownReport.pdf

APPENDIX A

Definition of Severity of a Pandemic Virus

The Centers for Disease Control—Pandemic Severity Assessment Framework:

1. COVID-19 is a high transmissibility virus.

2. COVID-19, in spite of popular belief, is a low to moderate clinical severity virus [except to seniors over the age of 60 with multiple severe comorbidities]. (See paragraph 4 and 5 below.)

3. This was known in February and March of 2020. (Reference D)

a) https://www.euro.who.int/__data/assets/pdf_file/0018/435312/week10-COVID-19-surveillance-report.pdf

b) https://www.euro.who.int/__data/assets/pdf_file/0020/435314/week11-COVID-19-surveillance-report.pdf

c) https://www.euro.who.int/__data/assets/pdf_file/0004/435316/week12-COVID-19-surveillance-report.pdf

4. Current peer reviewed research has confirmed that the Infection Fatality Rate (IFR) of COVID-19 is extremely age dependant. (Reference H, excerpt below) For people under the age of 50, this IFR is like the seasonal flu.

5. "A serology-informed estimate of the IFR in Geneva, Switzerland put the IFR at:
- age 5-9 years 0.0016% (95% Credible Interval, CrI 0, 0.019),
- 10-19 years 0.00032% (95% CrI 0, 0.0033),
- 20-49 years 0.0092% (95% CrI 0.0042, 0.016),
- 50-64 years 0.14% (95% CrI 0.096, 0.19), and,
- age 65+ outside of assisted care facilities 2.7% (95% CrI 1.6, 4.6),
- for an overall population IFR 0.32% (95% CrI 0.17, 0.56) (41).

Similarly, a large study from France found an inflection point in IFR around the age of 70 years (See their Figure 2D) (42)".

6. In comparison, the Spanish Flu 1918 Influenza Pandemic, would have ranked as an "Extraordinary" Pandemic in the Non-pharmaceutical Measures document (Reference F&G).

a) The Spanish Flu had a high measure of transmissibility and a high clinical severity. (See chart below from Reference G.)

b) It is estimated to have killed 50,000 Canadians, when the population of Canada was approximately 8.5 million.

c) In today's terms that would mean approximately 225,000 deaths based on Canada's current population.

d) COVID-19 has thus far killed approximately 24,900 Canadians, or over 9 times less than the Spanish Flu *in population adjusted terms.*

e) Worldwide the Spanish Flu is estimated to have killed at least 50 Million people, remembering the world's population was much lower. (Reference P) The population of the world was 1.8 Billion and today it is 7.8 Billion. Therefore, it is likely in today's terms the Spanish Flu would have killed 216 Million.

f) Worldwide COVID-19 has killed 3.4 Million.

g) Therefore, worldwide the Spanish Flu was 63.5 times more deadly than COVID-19.

7. In comparison, the Asian Flu Pandemic of 1957-58 killed approximately 2 Million people worldwide.

a) The world's population was 2.71 times lower.

b) Based on this fact it is likely the Asian Flu would have killed over 5 Million people.

c) This pandemic had similar characteristics to COVID-19, particularly deadly to the elderly. (Reference Q)

d) Worldwide COVID-19 has killed approximately 3.4 Million people.

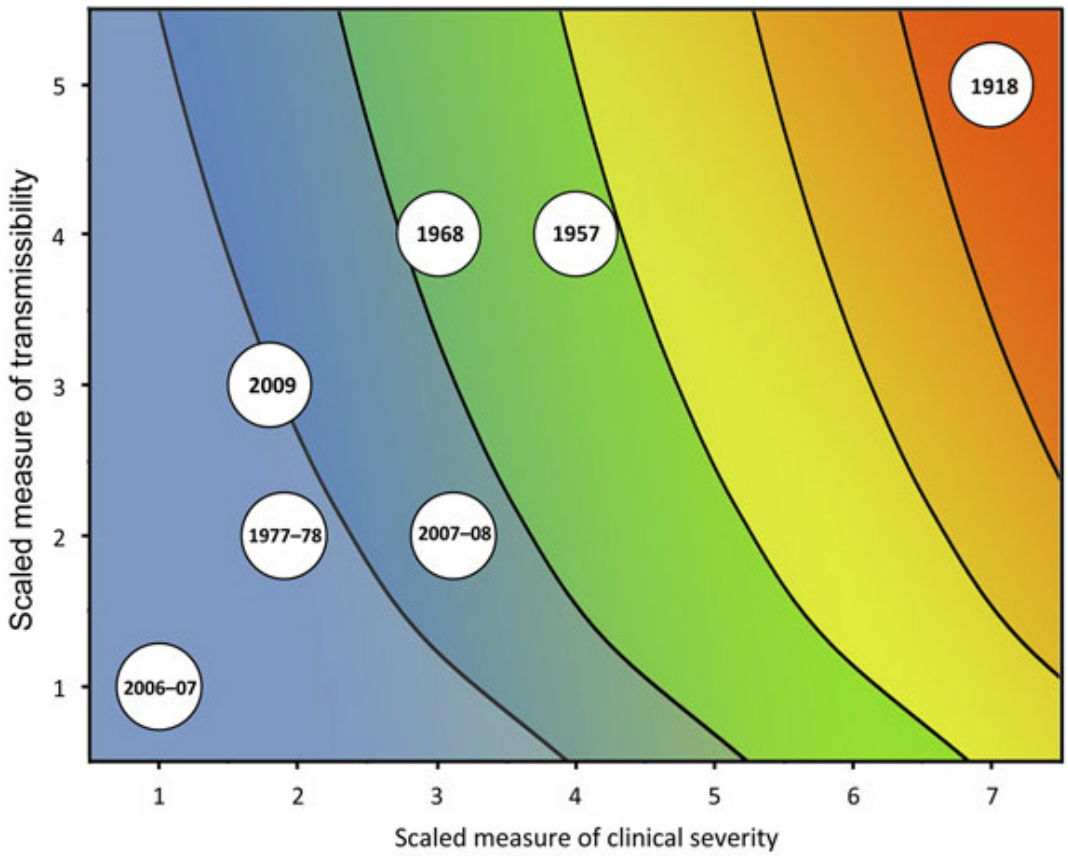
e) Therefore, worldwide the Asian Flu was 1.47 times more deadly than COVID-19.

8. In summary, worldwide COVID-19 has shown itself to be 63 times less deadly than the Spanish Flu and 1.4 times less deadly than the Asian Flu.

9. Recognizing COVID-19 is likely to kill more people before the vaccines are fully distributed and the Pandemic is declared over, on the World Health Organization's Non-Pharmaceutical Public Health Measures document, *COVID-19 ranks as a Moderate Pandemic,* in the worst case.

Figure 1

Transmissibility



APPENDIX B

Summary of Non-Pharmaceutical Measures

World Health Organization (WHO) (Reference F)
https://apps.who.int/iris/bitstream/handle/10665/329438/9789241516839-eng.pdf

Non-pharmaceutical public health measures for mitigating the risk and impact of **epidemic** and **pandemic** influenza dated 2019.

Table 1

Recommendations on the use of NPIs by severity level

SEVERITY	PANDEMIC[a]	EPIDEMIC
Any	Hand hygiene Respiratory etiquette Face masks for symptomatic individuals Surface and object cleaning Increased ventilation Isolation of sick individuals Travel advice	Hand hygiene Respiratory etiquette Face masks for symptomatic individuals Surface and object cleaning Increased ventilation Isolation of sick individuals Travel advice
Moderate	*As above, plus* Avoiding crowding	*As above, plus* Avoiding crowding
High	*As above, plus* Face masks for public School measures and closures	*As above, plus* Face masks for public School measures and closures
Extraordinary	*As above, plus* Workplace measures and closures Internal travel restrictions	*As above, plus* Workplace measures and closures
Not recommended in any circumstances	UV light Modifying humidity Contact tracing Quarantine of exposed individuals Entry and exit screening Border closure	UV light Modifying humidity Contact tracing Quarantine of exposed individuals Entry and exit screening Internal travel restrictions Border closure

NPI: non-pharmaceutical intervention; UV: ultraviolet.

Table 2

Summary of Recommendations for each NPI

The eighteen recommendations, which fall under 15 measures, are summarized in Table 2. The recommendations are based on the quality of evidence, which indicated within the table, and on the other indicators (i.e. values and preferences, balance of benefits and harms, resource implications, acceptability, feasibility and ethical considerations).

MEASURES	RECOMMENDATIONS	QUALITY OF EVIDENCE	STRENGTH OF RECOMMENDATION	WHEN TO APPLY
Hand hygiene	Hand hygiene is recommended as part of general hygiene and infection prevention, including during periods of seasonal or pandemic influenza. Although RCTs have not found that hand hygiene is effective in reducing transmission of laboratory-confirmed influenza specifically, mechanistic studies have shown that hand hygiene can remove influenza virus from the hands, and hand hygiene has been shown to reduce the risk of respiratory infections in general.	Moderate (lack of effectiveness in reducing influenza transmission)	Recommended	At all times
Respiratory etiquette	Respiratory etiquette is recommended at all times during influenza epidemics and pandemics. Although there is no evidence that this is effective in reducing influenza transmission, there is mechanistic plausibility for the potential effectiveness of this measure.	None	Recommended	At all times
Face masks	Face masks worn by asymptomatic people are conditionally recommended in severe epidemics or pandemics, to reduce transmission in the community. Although there is no evidence that this is effective in reducing transmission, there is mechanistic plausibility for the potential effectiveness of this measure.	Moderate (lack of effectiveness in reducing influenza transmission)	Conditionally recommended	In severe epidemics or pandemics
	A disposable surgical mask is recommended to be worn at all times by symptomatic individuals when in contact with other individuals. Although there is no evidence that this is effective in reducing transmission, there is mechanistic plausibility for the potential effectiveness of this measure.	Moderate (lack of effectiveness in reducing influenza transmission)	Recommended	At all times for symptomatic individuals
Surface and object cleaning	Surface and object cleaning measures with safe cleaning products are recommended as a public health intervention in all settings in order to reduce influenza transmission. Although there is no evidence that this is effective in reducing transmission, there is mechanistic plausibility for the potential effectiveness of this measure.	Low (lack of effectiveness in reducing influenza transmission)	Recommended	At all times

MEASURES	RECOMMENDATIONS	QUALITY OF EVIDENCE	STRENGTH OF RECOMMENDATION	WHEN TO APPLY
Other environmental measures	Installing UV light in enclosed and crowded places (e.g. educational institutions and workplaces) is not recommended for reasons of feasibility and safety.	None	Not recommended	N/A
	Increasing ventilation is recommended in all settings to reduce the transmission of influenza virus. Although there is no evidence that this is effective in reducing transmission, there is mechanistic plausibility for the potential effectiveness of this measure.	Very low (effective)	Recommended	At all times
	There is no evidence that modifying humidity (either increasing humidity in dry climates, or reducing humidity in hot and humid climates) is an effective intervention, and this is not recommended because of concerns about cost, feasibility and safety.	None	Not recommended	N/A
Contact tracing	Active contact tracing is not recommended in general because there is no obvious rationale for it in most Member States. This intervention could be considered in some locations and circumstances to collect information on the characteristics of the disease and to identify cases, or to delay widespread transmission in the very early stages of a pandemic in isolated communities.	Very low (unknown)	Not recommended	N/A
Isolation of sick individuals	Voluntary isolation at home of sick individuals with uncomplicated illness is recommended during all influenza epidemics and pandemics, with the exception of the individuals who need to seek medical attention. The duration of isolation depends on the severity of illness (usually 5–7 days) until major symptoms disappear.	Very low (effective)	Recommended	At all times
Quarantine of exposed individuals	Home quarantine of exposed individuals to reduce transmission is not recommended because there is no obvious rationale for this measure, and there would be considerable difficulties in implementing it.	Very low (variable effectiveness)	Not recommended	N/A
School measures and closures	School measures (e.g. stricter exclusion policies for ill children, increasing desk spacing, reducing mixing between classes, and staggering recesses and lunchbreaks) are conditionally recommended, with gradation of interventions based on severity. Coordinated proactive school closures or class dismissals are suggested during a severe epidemic or pandemic. In such cases, the adverse effects on the community should be fully considered (e.g. family burden and economic considerations), and the timing and duration should be limited to a period that is judged to be optimal.	Very low (variable effectiveness)	Conditionally recommended	Gradation of interventions based on severity; school closure can be considered in severe epidemics and pandemics

MEASURES	RECOMMENDATIONS	QUALITY OF EVIDENCE	STRENGTH OF RECOMMENDATION	WHEN TO APPLY
Workplace measures and closures	Workplace measures (e.g. encouraging teleworking from home, staggering shifts, and loosening policies for sick leave and paid leave) are conditionally recommended, with gradation of interventions based on severity. Extreme measures such as workplace closures can be considered in extraordinarily severe pandemics in order to reduce transmission.	Very low (effective)	Conditionally recommended	Gradation of interventions based on severity; workplace closure should be a last step only considered in extraordinarily severe epidemics and pandemics
Avoiding crowding	Avoiding crowding during moderate and severe epidemics and pandemics is conditionally recommended, with gradation of strategies linked with severity in order to increase the distance and reduce the density among populations.	Very low (unknown)	Conditionally recommended	Moderate and severe epidemics and pandemics
Travel advice	Travel advice is recommended for citizens before their travel as a public health intervention in order to avoid potential exposure to influenza and to reduce the spread of influenza.	None	Recommended	Early phase of pandemics
Entry and exit screening	Entry and exit screening for infection in travellers is not recommended, because of the lack of sensitivity of these measures in identifying infected but asymptomatic (i.e. pre-symptomatic) travellers.	Very low (lack of effectiveness in reducing influenza transmission)	Not Recommended	N/A
Internal travel restrictions	Internal travel restrictions are conditionally recommended during an early stage of a localized and extraordinarily severe pandemic for a limited period of time. Before implementation, it is important to consider cost–effectiveness, acceptability and feasibility, as well as ethical and legal considerations in relation to this measure.	Very low (effective)	Conditionally recommended	Early phase of extraordinarily severe pandemics
Border closure	Border closure is generally not recommended unless required by national law in extraordinary circumstances during a severe pandemic, and countries implementing this measure should notify WHO as required by the IHR (2005).	Very low (variable effectiveness)	Not recommended	N/A

IHR: International Health Regulations; N/A: not applicable; NPI: non-pharmaceutical intervention; RCT: randomized controlled trial; UV: ultraviolet; WHO: World Health Organization.

APPENDIX C

Placing COVID-19 into Perspective After One Full Year

COVID-19 Deaths verses Other Causes of Death

Data From (Links provided)

1. Transport Canada (2018) Motor Vehicle Traffic Collision deaths (Reference M)
2. Statistics Canada, Leading Causes of Death 2019 (Reference N)
3. Health Canada, COVID-19, Deaths by Age March 5, 2021 (Reference L)

Traffic Fatalities—2018

Table 3

Fatalities and Injuries by Age Group (2018)

Age Group (yrs)	Fatalities	Serious Injuries	Injuries (Total)
0 - 4	19	141	2,975
5 - 14	36	277	5,952
15 - 19	124	752	12,700
20 - 24	204	1,022	17,064
25 - 34	303	1,667	28,819
35 - 44	250	1,273	23,269
45 - 54	255	1,303	22,159
55 - 64	287	1,184	18,808
65 +	430	1,306	17,378
Not stated	14	101	3,723
Total	**1,922**	**9,026**	**152,847**

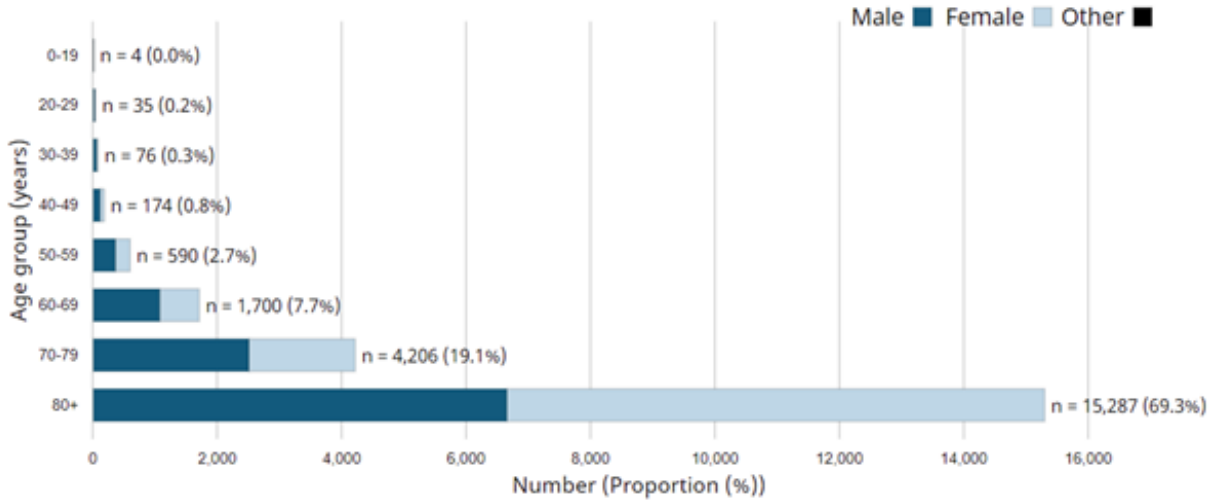
https://tc.canada.ca/en/road-transportation/motor-vehicle-safety/canadian-motor-vehicle-traffic-collision-statistics-2018

Other Diseases: Heart Disease (2019)

Figure 2

Age and Gender Distribution of COVID-19 Cases Deceased

Canada as of March 5, 2021 EST (n+22,072)



https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039401&pickMembers%5B0%5D=2.13&pickMembers%5B1%5D=3.1&cubeTimeFrame.startYear=2017&cubeTimeFrame.endYear=2019&referencePeriods=20170101%2C20190101

https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html

APPENDIX D

Other Examples

Canada Age 0-60 years

1. Car Accident Fatalities
    a. COVID-19 = 879
    b. Car Accident = 1331
    c. "Over 50% more likely to die in a car accident than to die from COVID-19."

Canada Age 20-40 years

2. Car Accident Fatalities
    a. COVID-19 = 111
    b. Car Accident = 630
    c. "Well over five times more likely to die in a car accident than to die from COVID-19."
3. Heart disease
    a. Heart disease 33+126+156 = 315
    b. COVID-19 = 111
    c. "Over two and a half times more likely to die of heart disease than to die from COVID-19."

Canada Age 40-60 years

1. Heart Disease
    a. Heart Disease 283+515+1037+1866 = 3701
    b. COVID-19 = 764
    c. "Nearly five times more likely to die of heart disease than to die from COVID-19."

Canada Age 60-70 years

1. Heart disease
    a. Heart Disease 2887+3755 = 6642
    b. COVID-19 = 1700
    c. "Nearly 4 times more likely to die of heart disease than to die of COVID-19."

Canada Age 70 years and up

1. Heart Disease
    a. Heart Disease 4946+12947+23951 = 41,844
    b. COVID-19 = 19,493
    c. "Well over twice more likely to die of heart disease than to die of COVID-19."


FRONTIER CENTRE
FOR PUBLIC POLICY